

**Tamotsu HASHIMOTO\*: Two new orchids from Peru**

橋本 保\*: ペルー産ラン科の2新種

Among the cultivated orchids in the greenhouse of Koishikawa Botanical Gardens, I have identified two species as new. These new orchids were collected by the members of the First Botanical Expedition to the Andes, University of Tokyo, 1965-1966 (Dr. Fumio Maekawa, the leader, Dr. Mikio Ono, Mr. Masamitsu Wada and I).

I am very grateful to Dr. Fumio Maekawa for his kind guidance in botany, and to Dr. Takasi Yamazaki for his advice on the taxonomy. To Mr. Yasuo Ohtsuka and his colleagues who have cultivated our collection of orchids in the greenhouse, I appreciate very much.

**Pleurothallis Fumioi Hashimoto, sp. nov.**

Affinis ad *P. pantasmoides* C. Schweinfurth sed minor et angustior.

Herba epiphytica, caespitosa; pro genere inter mediocres. Rhizoma abbreviatum. Caulis secundus, ascendens, supra sensim dilatatus; vagina fistulosa basilaris, scariosa. Folium coriaceum, subarcuato-ascendens, ob-lanceolato-lineatum, basi cuneatum cum lateribus in caulem decurrentibus. Inflorescentiae abbreviatae, 2- vel 4-florae. Flores fulvi, extus pubescentes. Sepala carnosa. Petala membranacea, apice acuminata, basi cuneata, margine denticulata. Labellum carnosum. Columna brevis.

Epiphytic herb, caespitose, up to about 18 cm tall, with abbreviated rhizomes. Secondary stem ascendent, 6-10 cm long, gradually dilated above, with scarious tubular sheaths at the base. Leaf solitary, coriaceous, more or less arcuately ascendent, oblanceolate-linear, acute and minutely tridantate at the apex, cuneate below with the sides decurrent on the stem, 5.5-7 cm long, 7.5-8 mm wide. Inflorescences abbreviated, rising from the summit of the stem above the base of the leaf, 2 to 4 flowered. Flowers greenish dull yellow, densely pubescent on the ovary and outer surface of the perianth. Dorsal sepal fleshy, oblanceolate-oblong, loosely tridenticulate-

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at the apex, 4.5 mm long, 1.5 mm wide. Lateral sepals fleshy, connate into orbicular lamina which is slightly bidentate at the apex, about 3.5 mm long and wide when expanded. Petals membranaceous, transparent, oblique lanceolate-oblong, acuminate at the apex, cuneate to the base, minutely denticulate, one nerved in violet, about 2.5 mm long. Lip fleshy, deep reddish violet, recurved in natural position, 1.5 mm long. Column arcuate, 2 mm long.



Fig. 1. *Pleurothallis Fumioi*.  
×ca. 2/5.



Fig. 2. *Pleurothallis Fumioi*,  
inflorescence. ×2 1/5.

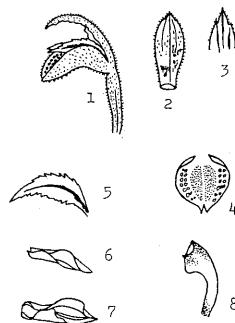


Fig. 3. *Pleurothallis Fumioi*.  
1, flower; ×ca. 2. 2, dorsal sepal; ×2. 3, dorsal sepal, apex. 4, connate lateral sepals, spread out; ×2. 5, petal; 4×. 6 & 7, lip, natural position; ×6 & 6 1/2. 8, column; ×5.

PERU: In tropical rainforest, between Quince Mil and Puente Río Inambari (59.5 km from Quince Mil, 1.7 km to Puente Río Lolomayo), Prov. Cuzco, collected by T. Hashimoto & M. Wada, Jan. 29, 1966, specimens made from a cultivated stock (B-428) in the greenhouse, Bot. Gard., Univ. of Tokyo (Sept. 11, 1970, T. Hashimoto)-holotype in TI.

This orchid resembles *P. pantasmoides*, but is distinguished by the following tabulated comparisons. *P. pantasmii* Reichb. f. of Nicaragua which was compared later by Dr. C. Schweinfurth in his original description of the former species, has glabrous ovaries and much larger flowers.

Mr. Masamitsu Wada and I botanized in Cachubamba Valley, near Mar-

	<i>P. Fumioi</i>	<i>P. pantasmoides</i> (after C. Schweinfurth)
Plant up to	18 cm	34 cm
Leaf	linear-lanceolate 7.5-8.5 mm wide	elliptic oblong up to 36 mm wide
Dorsal sepal	acute with an obscure dentation at both sides of the apex, 4.5 mm long	broadly obtuse 8.7 mm long
Petal, the apex of	acuminate	broadly truncate or truncate-retuse
Lip in natural expansion	1.5 mm long	3.5 mm long

capata, Prov. Cuzco and made a trip to Puente Río Inambari, an upper branch of the Amazon in January and February, 1966. There were *Epidendrum anceps* Jacq. and *E. difforme* Jacq. on the same branch of a tree. The flowers were also examined in our greenhouse in 1968.

The specific epithet is dedicated to Dr. Fumio Maekawa, the leader of the botanical expedition.

***Spiranthes glabrescens* Hashimoto,  
sp. nov.**

Herba terrestris, glabra praeter columnam, ca. 23 cm alta. Folia 2-3, basalia, carnosa, sessilia; lamina linearis-lanceolata, acuta vel acuminate, basi sensim angusta et vaginata. Spica adulescens flecta. Pedunculus ca. 10 vaginatus, ca. 5 cm altus. Flores parvi, membranacei. Sepalum dorsale linearis-lanceolatum, obtusum. Sepala lateralia lineali-lanceolato-falcata, basi connata. Petala linearis-spathulato-falcata, cum marginibus irregulariter crenulatis. Labellum expansum linearis-oblongum, prope apicem crenulatum, in positu natulari tubuloso-concavum. Columna suberecta, rare

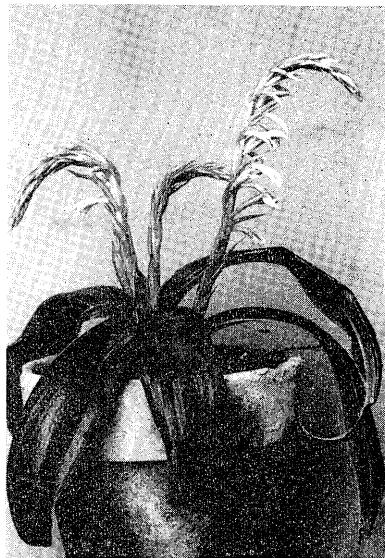


Fig. 4. *Spiranthes glabrescens*, showing young inflorescences.  $\times 3/10$ , leaves are recurved after cultivation.

pubescens, apice dilatata et capillata.

Terrestrial herb, glabrous except the column, about 23 cm high. Roots fasciculate. Leaves 2-3, basal, fleshy, linear-ob lanceolate, acute to acuminate, gradually narrowed to a broad sheathing base, up to 21 cm long and 3.3 cm wide, lustrous green upper surface, whitish with a prominent costa (midrib) and 4 nerves below. Cauline leaves not developed. Spike with about 40 flowers, secund, strongly nutant when young. Peduncle about 5 cm long, with about 10 sheath-like leaves. Flowers rather membranaceous, white with brownish green base and red spots, not fully opened, not resupinate, spicy fragrant. Bracts sheath-like, tubular, acute, about 17 mm long. Dorsal sepal linear-lanceolate, concave in basal 2/3 portion, flattened, narrowed (when spread out) and opened (more or less reflexed) with a red spot in front 1/3 portion, obtuse, 10 mm long, 2 mm wide, white with brownish green at basal half. Lateral sepals white with brownish green base, more or less opened, connate below into a short tube, linear-ob lanceolate-falcate, 11 mm long, 2 mm wide. Petals linear-spathulate-falcate, more or less irregularly crenulate

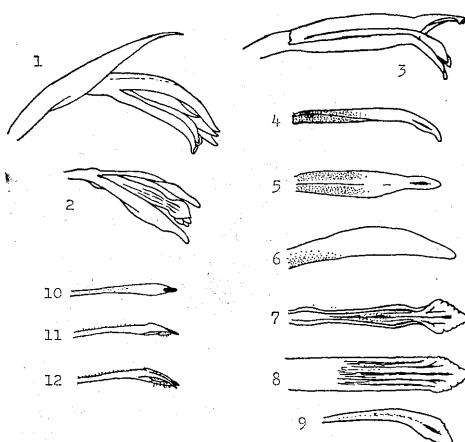


Fig. 5. *Spiranthes glabrescens*. 1, flower from side;  $\times 1/2$ . 2, flower from above;  $\times 1/2$ . 3, flower, removed lateral sepals;  $\times 2$ . 4 & 5, dorsal sepal;  $\times 2$ . 6, lateral sepal;  $\times 2$ . 7, lip, natural position;  $\times 2$ . 8, lip, spread out;  $\times 2$ . 9, petal;  $\times 2$ . 10~12, column seen from above, intermediate, and seen from the side;  $\times 1^{3/4}$ .

at the anterior margin, attached and paralleled to the dorsal sepal, 9 mm long, white with a red spot at the middle of the anterior broadest portion. Lip tubular-concave, linear-oblong if spread out, obtuse and crenulate at the anterior margin with red and reddish nerves, 12 or 13 mm long, 3 mm wide. Column suberect, 8 mm long, minutely ciliate, a few white hairs at the dilated brownish apical portions.

PERU: In subtropical forest, about 16 km to San Ramón, the way from Tarma, Prov. Junín, collected by F. Maekawa, M. Ono, T. Hashimoto & M. Wada, Jan. 16, 1966, type specimen

made from a cultivated stock (B-357) in the greenhouse, Bot. Gard., Univ. of Tokyo (Feb. 23, 1970, Y. Ohtsuka)-holotype in TI; Dec. 28, 1970, T. Hashimoto-merotype in TI; Feb. 1, 1971, T. Hashimoto-merotype in TI.

This species is characterized by not respiinate flowers among the genus. This is commonly adopted as a key feature of 'Spiranthes alliance' by orchid students. When we met with this plant at the place of collection, the leaves were spreading almost horizontally. The flowers are spicy fragrant in the early period.

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東京大学理学部附属植物園の温室で栽培されている2種類のランを新種として記載する。両種とも1965~1966年の第1次東京大学東亜関連調査団(環太平洋班)によって採集されたものである。*Pleurothallis Fumioi* は *P. pantasmaoides* (ペルー産)に近いが、全体が小形、葉は細く、花弁の先が鋭い点などで区別する必要がある。ペルー南部のキンセ・ミルからさらに下った熱帯降雨林で、倒木の枝に着生していた。指種名は調査団を率いて指導をされた前川文夫教授(当時)の名に因るものである。*Spiranthes glabrescens* は蕊柱を除いて無毛である。唇弁が上側に位置する特徴は属の中でも目立った性質である。ペルー中部のサン・ラモンに近い亜熱帯林中に生えていた。

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□朝比奈泰彦：日本産クラドニア図集 21×29.5 cm, 34頁, 原色写真2葉, 白黒27葉, 1971年。クラドニア(ハナゴケ属)の研究は朝比奈先生の研究で飛躍的な発展をとげたことはいまさら云うまでもない。先生の御研究はもっぱら本誌上で発表されてきたが、日本の地衣 I ハナゴケ属で昭和25年までの研究が集成されている。この本は難解なハナゴケ研究のバイブルとして地衣学者の間で広く使用されているが、現在は絶版でほとんど入手できない。今度のクラドニア図集はこの本の改訂版の一部として企画されたものであるが、学界の要望にこたえて図集だけが単独に出版された。

図集では、見開きの右側に写真、左側に学名があって使い易くなっている。採用された学名によって、各々のタクソノに対する朝比奈先生の考えをうかがい知ることができ、本書は単なる改訂版ではなく先生の半世紀近い研究の集大成とみる方がよいようと思われる。クラドニア類はウメノキゴケ類とともに地衣類を代表する大群であるので、専門家、非専門家を問わず、地衣類に興味を持たれる方の座右の書として広くすすめたい。なお本書についての詳細は地衣類研究会(国立科学博物館内)に問い合わせ下さい。

(黒川 道)